Docket No. 396.45117X00 Serial No. 10/537,437 <u>January 14, 2008</u>

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application:

LISTING OF CLAIMS:

1. (Previously presented) A method of fluorination which comprises fluorinating a monosaccharide or monosaccharide bonded to a base of a nucleic acid using a fluorinating agent represented by general formula (I):

$$R^0 - C - Y < R^1$$
 R^2
(I)

wherein Y represents nitrogen atom, R¹ and R² represent hydrogen atom or an alkyl group having 1 to 4 carbon atoms, and R¹ and R² may be bonded to each other to form a ring, and R⁰ represents a benzene ring or a pyridine ring, which has one or two substituents selected from the group consisting of alkyl group having 1 to 2 carbon atoms, halogen atom, methoxy group, amino group and nitro group, which may be the same as or different from each other.

- 2. (Original) A method of fluorination according to Claim 1, wherein, in general formula (I), Y represents nitrogen atom, R^0 represents 3-methyphenyl group or 2-methoxyphenyl group, and R^1 and R^2 represent ethyl group.
- 3. (Previously presented) A method of fluorination according to Claim 1, wherein the monosaccharide or monosaccharide bonded to a base of a nucleic acid is fluorinated by a thermal reaction.

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4. (Currently amended) A method of fluorination which comprises fluorinating a monosaccharide or monosaccharide bonded to a base of a nucleic acid by bringing the monosaccharide or monosaccharide bonded to a base of a nucleic acid and a fluorinating agent represented by general formula (II):

$$\mathbf{R}^{0} - \mathbf{C} - \mathbf{Y} < \mathbf{R}^{1}$$

$$\mathbf{R}^{2} \qquad (II)(III)$$

wherein Y represents nitrogen atom or phosphorus atom, x represents hydrogen or halogen atom, R⁰, R¹ and R² represent hydrogen atom or an alkyl or aryl group which may have substituents, the atom and the groups represented by R⁰, R¹ and R² may be a same with or different from each other, and two or three of the groups represented by R⁰, R¹ and R² may be bonded to each other to form a ring into reaction with each other under irradiation with at least one of microwave and electromagnetic wave having a wavelength around a microwave region.

- 5. (Previously presented) A method of fluorination according to Claim 4, wherein the monosaccharide or monosaccharide bonded to a base of a nucleic acid is fluorinated by bringing the monosaccharide or monosaccharide bonded to a base of a nucleic acid and the fluorinating agent represented by general formula (I) into reaction with each other under irradiation with microwave having a frequency of 1 to 30 GHz.
 - 6. (Cancelled).

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7. (Currently amended) A method of fluorination according to Claim 4, wherein the fluorinating agent is a compound represented by general formula (III):

$$R^3 - C - Y < R^4$$
(III)

wherein R³, R⁴, and R⁵R3, R4 and R5 each independently represent an alkyl or aryl group which may have substituents, X represents hydrogen atom or a halogen atom, and two or three of the groups represented by R³, R⁴, and R⁵ R3, R4 and R5 may be bonded to each other to form a cyclic structure.

- 8. (Original) A method of fluorination according to Claim 7, wherein, in general formula (III), R³ represents an aryl group which may have substituents, X represents fluorine atom, and R⁴ and R⁵ represent an alkyl or aryl group having 1 to 32 carbon atoms which may have substituents.
 - 9.-12. (Cancelled).
- 13. (Previously presented) A method of fluorination according to Claim 4, wherein the fluorinating agent is a compound represented by general formula (II) in which X represents fluorine atom.

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14. (Currently amended) A method of fluorination according to Claim 4, wherein the fluorinating agent is a compound represented by general formula (II) in which X represents fluorine atom, Y represents nitrogen atom, R^0 represents 3-methylphenyl group or 2-methoxyphenyl group, and R^1 and R^2 R1 and R2 represent ethyl group.

15.-20. (Cancelled).

21. (Previously presented) A method of fluorination according to Claim 4, wherein the fluorination is conducted in a presence of an agent accelerating a reaction.

22.-24. (Cancelled).

25. (Previously presented) The method of fluorination according to Claim 1, wherein the monosaccharide is selected from the group consisting of glucose, fucose, N-acetylglucosamine, N-acetylgalactosamine, N-acetylneuraminic acid, erythrose, threose, ribose, arabinose, xylose, arose, lyxose, altrose, mannose, gulose, idose, galactose, talose, psicose, furctose, sorbose, tagatose, hexaenose, apiose, and a deoxy sugar, an amino sugar, a thio sugar, a condensed sugar and an anhydride of the monosaccharide, and the monosaccharide bonded to a base of a nucleic acid is selected from the group consisting of a nucleoside, an oligonucleoside, ribonucleic acid and deoxyribonucleic acid.